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## The effects of objective self awareness and anxiety upon cartoon humor appreciation

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THE EFFECTS OF OBJECTIVE SELF AWARENESS AND ANXIETY  
UPON CARTOON HUMOR APPRECIATION

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A Thesis

Presented to

The Faculty of the Department of Psychology  
The College of William and Mary in Virginia

In Partial Fulfillment  
Of the Requirements for the Degree of  
Master of Arts

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by

Kathleen Bullock

1983

APPROVAL SHEET

This thesis is submitted in partial fulfillment of  
the requirements for the degree of

Master of Arts

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## ABSTRACT

The present study was designed to assess the effects of anxiety and conditions of objective self awareness upon cartoon humor appreciation. The possible relationship between state anxiety and objective self awareness was also investigated.

Subjects who were high or low in trait anxiety were asked to rate the humorousness of sexual, aggressive, and nonsense cartoons, and to complete a state anxiety questionnaire. These tasks were performed while the subjects were in one of three conditions: with a mirror present, with a videotape camera present, or without any objective self awareness manipulation present.

The results indicated that subjects in the mirror condition rated the sexual cartoons as being significantly funnier ( $p < .05$ ) than did subjects in the control condition. There was no significant difference between the camera and the mirror or control conditions. Apparently the camera did not have the same effect that the mirror did. The results are discussed in terms of objective self awareness theory, and in terms of an alternate theory of private versus public self awareness. No relationship between objective self awareness and state anxiety was evident.

THE EFFECTS OF OBJECTIVE SELF AWARENESS AND ANXIETY  
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## INTRODUCTION

The purpose of the present study was to investigate some of the factors that might influence a person's sense of humor. There are many possible determiners of what will be considered to be humorous. Such factors as a person's age, sex, cultural background, intelligence, relevant knowledge, personal beliefs and feelings, temporary moods and need states, the context in which the material is presented, familiarity with the content of the material, and the form of the material may influence whether or not an item is perceived as being humorous (Cattell & Luborsky, 1947). In this study, trait and state anxiety, sex of subject, material content (sexual vs. aggressive vs. nonsense cartoons), and conditions of "objective self awareness" were investigated as possible influencers of humor appreciation.

Early humor theorists seem to have disagreed with one another more often than they agreed with or supported each others' theories (Rapp, 1947). Many early theorists stressed the cognitive aspects of humor, e.g., incongruity, unexpected resolutions, etc. Others suggested that the function of humor was to satisfy man's desire for a feeling of superiority over others. Some theorists emphasized the affective, joyful aspects of humor and laughter; and some



addressed more than one aspect of humor appreciation (Eysenck, 1942). More recently, McGhee suggested that incongruity is a basic feature of all humor: "that is, something unexpected, out of context, inappropriate, unreasonable, illogical, exaggerated, and so forth, must serve as the basic vehicle for the humor of an event, even though additional elements like sex and aggression maximize funniness" (McGhee, 1979, p. 10).

The pleasure of humor has been associated with anxiety reduction by some theorists (e.g., Lafal, Levine & Redlich, 1953; Young & Frye, 1966), or with the expression of aggressive impulses (e.g., Rosenwald, 1964). A recent study describes humor appreciation as involving "a sudden change in or widening of the recipient's experiential horizon" (Heuscher, 1980, p. 1546); which may include the release of unconscious wishes or impulses, or the experiencing of ideas, feelings or attitudes which were not being considered at the time (Heuscher, 1980). See McGhee (1979) for a review of humor theory.

Researchers have studied the effects of a variety of personal and situational characteristics upon the appreciation of humorous materials. A number of studies have found correlations between various aspects of personality and humor preferences (e.g., Byrne, 1956; Cattell &

Luborsky, 1947; Epstein & Smith, 1956; Eysenck, 1942; Hetherington & Wray, 1964; Murray, 1935; Rosenwald, 1964). Such personal characteristics as sex of subject (Priest & Wilhelm, 1974; Young & Frye, 1966), marital status (Priest & Wilhelm, 1974), and birth order (McGhee, 1973) have also been found to be related to humor appreciation.

Research suggests that situational factors can affect a person's sense of humor. Sexually arousing (Strickland, 1959) or angering (Dworkin & Efram, 1967; Prerost & Brewer, 1977; Strickland, 1959) subjects have been found to affect their humor preferences. Crowding subjects (Prerost & Brewer, 1980), or exposing them to material while alone vs. while in a group (Malpass & Fitzpatrick, 1959; McGhee, 1973) also appear to influence their reactions to humorous stimuli. Not surprisingly, the number of times material is presented (i.e., number of repetitions) has also been found to affect how humorous the material is thought to be (Pistole, 1979).

The empirical relationship between anxiety and humor appreciation is not yet clear. Many theorists, especially those who are psychoanalytically oriented, feel that humor serves to reduce anxiety (McGhee, 1979). However, research in this area has been inconclusive. Some studies have found no effect for anxiety, some have found a lower appreciation

among highly anxious people, some studies have found higher appreciation among highly anxious people, and some studies have reported mixed results (Hom, 1966). Research on the effects of anxiety upon humor appreciation has generally involved measures of trait anxiety, and the Taylor Manifest Anxiety Scale (the MAS) seems to have been the most popular measure of subject anxiety (Hom, 1966).

In the present study both state and trait anxiety were measured. Since previous research involving trait anxiety and humor has not been conclusive, an objective of the present study was to contribute further information which might be helpful in clarifying any possible relationship. Measuring state anxiety was also thought to be useful, since it seems relevant to know whether or not the subjects felt anxious in the particular situation in which they encountered the humorous stimuli. No predictions concerning the effects of anxiety upon humor appreciation were made prior to the study, since previous research in this area has been so contradictory.

The present study was also concerned with the effects of "objective self awareness" (OSA) upon humor appreciation. Originally described by Duval and Wicklund (1972), OSA refers to a state in which attention is focused upon the self, upon one's own actions, feelings, or thoughts.

It has been suggested that OSA is much like what is commonly referred to as a feeling of self consciousness (Liebling & Shaver, 1973). It should be noted however, that OSA refers to a situationally-induced state; and thus, it contrasts with the model of "self consciousness" described by Fenigstein (1979), which refers to a personal predisposition (i.e., trait) to feel self conscious. There are various, alternate accounts of the processes of attention to the self. See Buss (1980) for a review of theory and research in this area.

OSA theory suggests that attention can either be directed towards the self or towards external stimuli. Situations which remind a person of his or her object status (i.e., which direct attention towards the self) can induce the OSA state. See Wicklund, 1975, for a review of OSA theory and research. It should be noted that the theory makes no distinction between attention to internal, subjective elements of the self, and attention to the overt (objective) elements of the self. According to Wicklund (1975) any manipulation which focuses attention upon the self serves to remind the person of her object status.

While in an objectively self aware state a person compares himself to some standard of correctness. A "standard" in this context refers to a "mental representation of cor-

rect behavior, attitudes and traits" (Duval & Wicklund, 1972, p. 3-4). The particular standard to which the person would compare himself would be determined by the situation. So that, if a person was asked to complete an attitude questionnaire while in an objectively self aware state, the person would presumably compare his or her attitudes to those of an ideal standard. If the person was given a task to perform while in an OSA state, the person would compare his or her task performance to that of a standard of correctness, according to Duval and Wicklund's theory. Research has confirmed that attitude change and task performance are affected by OSA manipulations. For example, German prose-copying was found to be enhanced, and subject opinions were found to change so as to conform to a positive reference group under OSA conditions (Wicklund & Duval, 1971).

Generally, when an objectively self aware person compares his (or her) characteristics or behavior to an ideal standard, the person will perceive a "negative discrepancy", according to the theory. That is, in most situations the person will seem to fall short of the ideal standard which is used for comparison (Duval & Wicklund, 1972). In situations in which a person's performance has exceeded his or her expectations, there may exist briefly a "positive discrepancy" (i.e., the person may perceive herself as exceeding the standard of correctness, however these situa-

tions occur only rarely (Wicklund, 1975).

The "negative discrepancy" which generally arises during the OSA state is thought to be aversive to the person experiencing it. Duval and Wicklund concluded that "the state of objective self awareness will lead to a negative self evaluation and negative affect whenever the person is aware of a self contradiction or a discrepancy between an ideal and his actual state" (1972, p. 4). In support of these ideas is the finding that mirror presence resulted in lower subject self-esteem ratings (Ickes, Wicklund & Ferris, 1973). The negative affect which is assumed to occur (generally) with OSA supposedly motivates the person to try to reduce the discrepancy between his or her actual self (i.e., the aspect of self most salient in the situation) and the standard or correctness (Wicklund, 1975).

A variety of experimental manipulations have been used to induce the OSA state, although the presence of a mirror has been most commonly used. Wicklund and Ickes (1972) found that tape recordings of a subject's own voice increased predecisional information seeking. Voice recordings were also found to increase subject conformity with the opinions of a positive reference group (Wicklund & Duval, 1971).

Another technique of inducing OSA involves the presence of a television or videotape camera. Wicklund and Duval (1971) suggest that "facing a television camera would be a relatively strong means of arousing objective self awareness because the person can easily be evaluated by numerous others once a videotape is made, and further, a television camera should be especially effective because very few people are accustomed to being evaluated via the television screen. Given their unfamiliarity with the kinds of evaluations that might ensue once they have committed their visual images to tape, they should be particularly sensitive about themselves and concerned about themselves in numerous respects" (Wicklund & Duval, 1971, p. 331). They found that the presence of a videotape camera resulted in subjects changing their opinions to conform with counter-attitudinal essays which they had written earlier (Wicklund & Duval, 1971).

Mirror presence has been found to reduce subject suggestibility as to how arousing slides of nudes were (Scheier, Carver & Gibbons, 1979). The presence of a mirror was also found to increase the number of self-referent statements (Carver & Scheier, 1978). Aggression levels (shocks administered) increased with mirror presence when subjects were angered (Scheier, 1976), or told that

shocking would facilitate learning (Carver, 1974). However, mirror presence was found to reduce aggression (shocks administered) when subjects were not angered or given pro-shock justification (Scheier, Fenigstein & Buss, 1974). In the present study there were two OSA conditions: one condition in which a mirror was present, and another condition in which a videotape camera was present. There was also a control condition in which no OSA manipulation was present.

Psychoanalytically-oriented theorists suggest that the appreciation of sexual and aggressive humor is based upon the expression of unacceptable wishes, by disguising and ridiculing them (Gollob & Levine, 1967; Levine & Redlich, 1966; Singer, Gollob & Levine, 1969). If such is the case, then manipulations which increase one's awareness of the socially unacceptable theme of sexual and aggressive humor should reduce the perceived humorousness of such types of humor. As mentioned above, OSA manipulations are thought to increase adherence to ideal (in this case, socially acceptable) standards. Therefore, in the present study the OSA manipulations were expected to reduce the perceived humorousness of the sexual and aggressive cartoons (see Method section for cartoon category definitions). That is, subject ratings of the humorousness of the sexual



and aggressive cartoons were predicted to be lower in the mirror and the camera conditions than in the control condition.

Subsequent to this study, Buss (1980) suggested a model of self awareness relevant to the OSA model and to the present study. Buss suggests that there are two types of self awareness: private self awareness and public self awareness. Whereas, in OSA theory there is ~~only~~ a distinction between attention directed towards the self and attention directed away from the self (i.e., only one type of self awareness).

Private self awareness refers to a person's awareness of sensations, motivations, thoughts, etc., which are known only to him or herself. Public self awareness refers to a person's awareness of the overt aspects of him or herself (i.e., what others might perceive). Private self awareness, Buss suggests, leads to a clarification and/or intensification of a person's thoughts, feelings, motivations, etc. Public self awareness, in contrast, should increase the person's concern for what others might think or feel about him or her; it should increase concern about and adherence to social standards.

Furthermore, Buss differentiates between the effects of mirror presence and the presence of a videotape camera.

The presence of a small mirror which shows only a person's head and shoulders (like the one used in the present study) is supposed to induce private self awareness. A videotape camera, on the other hand, is thought to induce public self awareness, since such cameras are "recording devices which are, in effect, mechanical replacements for live audiences" (Buss, 1980, p. 30). Thus, mirror presence should result in an intensification of a person's feelings, beliefs, etc. - as the person becomes privately self aware. Whereas the presence of a videotape camera should result in an increased concern about and conformity with social standards - as the person becomes publicly self aware.

Previous research, including OSA research, can be interpreted in terms of Buss's distinction between private and public self awareness. Since OSA theory suggests that the ideal standard will be that which is most salient in the particular situation, it allows that in some instances (e.g., with a mirror present) the standard may be a personal one, while in other instances (e.g., with a camera present) a social standard would be more salient. However, as Buss noted, the effects of a camera and a mirror have not been compared in the same study. "In virtually all previous research, private and public manip-

ulations were not compared in the same experiment. What we need now is research that contrasts the effect of a mirror or instruction to introspect with the effect of an audience, television camera, or feedback from a videotape or tape recorder" (Buss, 1980, p. 108).

The present study offers a way of comparing private (mirror) and public (camera) manipulations. If mirror presence heightens awareness of personal thoughts, feelings, etc., then it should not serve to diminish the perceived humorousness of any of the cartoons (including the sexual and aggressive cartoons); in fact, it should intensify perceived humorousness. Whereas, if the presence of a videotape camera heightens concern for social standards, then the perceived humorousness of the sexual and aggressive cartoons should be reduced. Thus, this study permits comparison of the hypothesized OSA effects (reduced sexual and aggressive cartoon ratings) with the different predictions which Buss's theory would suggest. Since Buss's (1980) theory appeared subsequent to the present study, his theory did not influence the experimental hypotheses. However, the results of the study will be considered in terms of Buss's theory in the Discussion section.

Previous research has shown that males rate sexual cartoons as being more humorous than do females (Malpass

& Fitzpatrick, 1959; Sekeres & Clark, 1980). In accordance with these findings, it was predicted that males would rate the sexual cartoons higher (as being funnier) than would the females. Although, in accordance with the prediction that OSA would reduce the ratings of sexual cartoons, it was expected that the sex differences in sexual cartoon ratings would be seen most strongly in the control condition.

Another question addressed by this study was that of a possible relationship between objective self awareness and state anxiety. A previous study (Bullock, 1980) found that the presence of a videotape camera resulted in significantly higher ratings on the Spielberger state anxiety scale,  $F(1,29)=5.57$ ,  $p<.03$ . It seems possible that the "negative affect" (Duval & Wicklund, 1972, p. 4) which supposedly results from the OSA state is somehow related to (perhaps identical to) state anxiety. Another possibility is that state anxiety was produced by the videotape manipulation itself; that there was something anxiety-provoking about the prospect of being videotaped (in addition to any self awareness effects). The present study addressed the issue of whether or not OSA manipulations produce state anxiety, and whether the videotape and mirror manipulations are similar in this regard,

or whether they produce different effects. In accordance with the results of the earlier study, it was predicted that subject state anxiety levels would be higher in the "camera" condition than in the "mirror" or control conditions.

To summarize, this experiment was intended to address several questions. The possible effects of objective self awareness upon humor appreciation were examined, and in accordance with psychoanalytically-oriented theorists it was predicted that OSA would reduce ratings of the sexual and aggressive cartoons. It was also predicted that males would rate the sexual cartoons higher than would females, especially in the control condition. Further clarification of the relationship between trait and state anxiety and humor appreciation was attempted, but due to the lack of consistency in previous research findings, no predictions were made. The study also explored the possibility that OSA is related to state anxiety, or that the presence of a videotape camera by itself produces anxiety. In accordance with an earlier study, it was predicted that state anxiety would be higher in the camera condition.

## METHOD

Cartoon pre-ratings

Phase 1: cartoon categorization. Thirty-four introductory psychology students from the College of William and Mary (17 males and 17 females) served as subjects in Phase 1. The materials consisted of 70 magazine-type cartoons from Addams (1976), Delacorte and White (1978), the New Yorker magazine, Playboy magazine, Thurber (1945), and Wilson (1971), which were presented to the subjects individually in random order (randomized for each subject). Subjects were asked to sort the cartoons into the following categories (from Hetherington & Wray, 1964): Nonsense Cartoons - characterized by absurdity, incongruity, or playfulness; Sexual Cartoons - characterized by sexual arousal, stimulation or activity; Aggressive Cartoons - characterized by a hostile intent to ridicule, depreciate, or injure, and; Other Cartoons - any cartoon which cannot be adequately described by any of the previous three categories. Subjects were provided with copies of the category definitions in order to help them to place each cartoon into an appropriate category. Of the original cartoons, 35 were used in the second phase of the pre-ratings procedure. These 35 cartoons were most often

categorized in the same way by the subjects.

Phase 2: Pre-rating of cartoon humorousness. A second group of 34 introductory psychology students (17 males and 17 females) was asked to rate the humorousness of the 35 cartoons selected in Phase 1. Subjects were run individually, and the cartoons were presented to them in random order (randomized for each subject). They were asked to rate each cartoon on an 11-point scale, ranging from a rating of 1 - "not at all humorous" to a rating of 11 - "extremely humorous". This phase was carried out as a means of insuring that the final cartoons selected would be of approximately equal humorousness: so that, there would not be any substantial differences between the three categories of cartoons about which experimental predictions have been made (sexual, nonsense, aggressive), in terms of humorousness, before the experimental manipulations were introduced.

Phase 3: Final cartoon selection. Twenty-four cartoons were selected for the final experiment. Since the cartoons which were categorized as "other" were not germane to any of the experimental hypotheses, they were eliminated. The remaining cartoons had been categorized in the same way by at least 80% (approximately) of the student raters, and the number of males and females who had so-categorized the cartoons was approximately equal (never a

difference of more than one person, between the number of males rating the cartoon in a particular way, and the number of females rating the cartoon in the same way). The cartoons selected included eight Nonsense Cartoons, with mean humorousness of 5.14 (on the 11-point scale); 10 Sexual Cartoons, with mean humorousness of 5.21; and six Aggressive Cartoons, with mean humorousness of 4.86. Since the experiment's hypotheses and predictions concerning the cartoon ratings were made in relative terms, i.e., in terms of ratings under the Control Condition vs. ratings in the Experimental Conditions, the slight differences between the ratings of the three types of cartoons (found in the pre-rating procedure) was not thought to affect the outcome of the study.

### Subjects

Seventy-four introductory psychology students, 26 males and 48 females, from the College of William and Mary served as subjects. Problems with subject availability resulted in unequal representation of the sexes (i.e., more female than male subjects). Potential subjects were given the Taylor Manifest Anxiety Scale (MAS), and were allowed to participate only if they scored in the lower one-third or upper one-third of the scores (only if they were high or low in trait anxiety). Par-



ticipants in this study had scores  $\geq 24$ , or  $\leq 10$  on the MAS. Subjects were randomly assigned to each of the three experimental conditions.

### Materials

The 24 cartoons which were pre-selected were duplicated and grouped in 10 randomly ordered stacks, which were randomly assigned to particular subjects (see Appendix A).

### Experimental Design

The experimental design was a 2x2x3: trait anxiety (two levels) x sex (two levels) x condition (three levels). The dependent variables were state anxiety and cartoon ratings (for the three categories of cartoons).

### Procedure

In all three conditions, the subject (run individually) was asked to rate the humorousness of each of the cartoons on an 11-point scale (like that used in the pre-ratings). Following this task, the subject was asked to complete the Spielberger State Anxiety Scale. The subject was left alone while rating the cartoons and completing the Anxiety Scale.

In the "Camera" condition there was a videotape camera across the table from the subject pointed at him or her, and there was a notation on these subjects' con-

sent forms that they should realize that they "may be videotaped" during their task performance. In the "Mirror" condition there was a large mirror on the table facing the subject while he or she completed the tasks (and there was not any special notation on their consent forms). In the "Control" condition there was no camera or mirror present during the subject's task performance.

## RESULTS

The first analysis was a sex (two levels) x trait anxiety (two levels) x condition (three levels) analysis of variance, with repeated measures for the three types of cartoons. No significant main effects or interactions were found. Since none of the analyses revealed significant sex differences, and since the number of subjects in some cells was very small (see Table 2a for number of subjects per cell), each of the analyses was repeated with males and females combined.

Separate analyses of variance were performed for the ratings of each of the three types of cartoons and for the state anxiety scores. The analyses of variance for the A-state scores (see Tables 1a & 1b) revealed a significant main effect for trait anxiety. This main effect showed that trait anxiety scores were indicative of the ensuing state anxiety scores. There were no other main effects or interactions found regarding the state anxiety scores.

The mean ratings of the humorousness of the three types of cartoons are shown in Tables 2-4ab. The analyses of variance for the Nonsense and Aggressive cartoons revealed no significant main effects or interactions (see Tables 2c&d and 3c&d).

The analysis for the ratings of the sexual cartoons, with sex as an independent variable revealed a significant condition by trait anxiety interaction, as shown in Table 4c. However, as noted above, due to small cell sizes the analysis was repeated with males and

Table 1a.  
Analysis of Variance: State Anxiety Scores

Source	df	Mean Square	F	p
Sex (S)	1	18.00	0.23	0.64
Trait Anxiety (A)	1	1592.95	19.96	0.00 ***
Condition (C)	2	16.87	0.21	0.81
SxA	1	23.08	0.29	0.59
SxC	2	5.22	0.07	0.94
AxC	2	82.61	1.04	0.36
SxAxC	2	2.85	0.04	0.97
Error	62	79.81		

Table 1b.  
Analysis of Variance: State Anxiety Scores  
 (Males & Females Combined)

Source	df	Mean Square	F	p
Trait Anxiety (A)	1	2149.65	29.22	0.00 ***
Condition (C)	2	15.28	0.21	0.31
AxC	2	96.54	1.31	0.28
Error	68	73.57		

females combined. In the second analysis only a significant main effect for condition (see Table 4d) emerges. A Duncan's Multiple Range test was performed, which indicated that the ratings of the sexual cartoons were significantly higher ( $p < .05$ ) in the mirror condition than in the control condition. There was no significant difference between the camera condition and either the mirror or the control conditions. The mean rating in the mirror condition was 5.77, versus 5.09 in the camera condition, and 4.58 in the control condition.

Table 2a  
Mean Humorousness of Nonsense Cartoons

		Control	Mirror	Camera
High A-Trait	Female	5.58 (12)	5.54 (3)	4.80 (13)
	Male	6.29 (3)	4.79 (6)	6.44 (2)
Low A-Trait	Female	5.73 (6)	5.86 (6)	5.63 (8)
	Male	5.60 (6)	6.35 (5)	5.31 (4)

Ratings were on an 11-point scale  
 Number of subject per cell in parentheses

Table 2b  
Mean Humorousness of Nonsense Cartoons  
(males & females combined)

	Control	Mirror	Camera
High A-Trait	5.73 (15)	5.04 (9)	5.02 (15)
Low A-Trait	5.67 (12)	6.09 (11)	5.52 (12)

Ratings were on an 11-point scale  
 Number of subjects per cell in parentheses

Table 2c  
Analysis of Variance: Nonsense Cartoon Ratings

Source	df	Mean Square	F	<u>p</u>
Sex (S)	1	1.04	0.46	0.50
Trait Anxiety (A)	1	0.43	0.19	0.67
Condition (C)	2	0.33	0.14	0.87
SxA	1	0.95	0.42	0.52
SxC	2	0.71	0.31	0.73
AxC	2	2.12	0.93	0.40
SxAxC	2	2.90	1.27	0.29
Error	62	2.27		

Table 2d  
Analysis of Variance: Nonsense Cartoon Ratings  
 (Males & Females Combined)

Source	df	Mean Square	F	<u>p</u>
Trait Anxiety (A)	1	4.45	2.03	0.16
Condition (C)	2	1.27	0.58	0.56
AxC	2	1.76	0.80	0.45
Error	68	2.19		

Table 3a  
Mean Humorousness of Aggressive Cartoons

	Control	Mirror	Camera
High A-Trait			
Female	4.96	4.72	5.09
Male	6.78	4.69	4.67
Low A-Trait			
Female	5.69	5.69	4.96
Male	5.67	6.63	5.42

Ratings were on an 11-point scale

Table 3b  
Mean Humorousness of Aggressive Cartoons  
(males & females combined)

	Control	Mirror	Camera
High A-Trait	5.29	4.70	5.03
Low A-Trait	5.68	6.12	5.11



Table 3c  
Analysis of Variance: Aggressive Cartoon Ratings

Source	df	Mean Square	F	<u>p</u>
Sex (S)	1	3.01	0.94	0.34
Trait Anxiety (A)	1	3.98	1.24	0.27
Condition (C)	2	2.51	0.78	0.46
SxA	1	0.00	0.00	0.99
SxC	2	0.96	0.29	0.74
AxC	2	3.37	1.05	0.36
SxAxC	2	3.29	1.03	0.37
Error	62	3.21		

Table 3d  
Analysis of Variance: Aggressive Cartoon Ratings  
 (Males & Females Combined)

Source	df	Mean Square	F	<u>p</u>
Trait Anxiety (A)	1	7.09	2.29	0.13
Condition (C)	2	1.26	0.41	0.67
AxC	2	2.69	0.87	0.43
Error	68	3.10		

Table 4a

Mean Humorousness of Sexual Cartoons

	Control	Mirror	Camera
Female	4.50	5.70	3.73
High A-Trait			
Male	6.55	6.17	4.62
Female	4.58	5.38	5.40
Low A-Trait			
Male	4.10	6.12	6.08

---

Ratings were on an 11-point scale

Table 4b

Mean Humorousness of Sexual Cartoons  
 (males & females combined)

	Control	Mirror	Camera
High A-Trait	4.77	5.79	4.32
Low A-Trait	4.42	5.75	5.70

---

Ratings were on an 11-point scale

Table 4c  
Analysis of Variance: Sexual Cartoon Ratings

Source	df	Mean Square	F	<u>p</u>
Sex (S)	1	7.32	3.45	0.07
Trait Anxiety (A)	1	0.06	0.03	0.87
Condition (C)	2	5.35	2.52	0.09
SxA	1	2.36	1.11	0.30
SxC	2	0.06	0.03	0.98
AxC	2	8.65	4.07	0.02 ***
SxAxC	2	2.51	1.18	0.31
Error	62	2.12		

Table 4d  
Analysis of Variance: Sexual Cartoon Ratings  
(Males & Females Combined)

Source	df	Mean Square	F	<u>p</u>
Trait Anxiety (A)	1	1.94	0.91	0.34
Condition (C)	2	9.43	4.44	0.02 ***
AxC	2	4.71	2.22	0.12
Error	68	2.13		

## DISCUSSION

It was predicted that the two OSA conditions would reduce the humorousness ratings of the aggressive and sexual cartoons, in accordance with psychoanalytically-oriented theorists. However, no OSA effect was evident with the aggressive cartoons, and the mirror condition was found to increase the ratings of the sexual cartoons.

The fact that the OSA manipulations had such a limited effect upon the cartoon ratings could be explained in various ways. Wicklund (1975) suggested that a person's attention can either be directed towards or away from the self. Perhaps the subjects were able to avoid OSA by attending to the cartoons in front of them, rather than the mirror or the camera across the table from them. If subjects were concentrating on the cartoons rather than the OSA manipulations, then there would not be any OSA effect. It may be that rating funny cartoons may be such an interesting activity that people fail to attend to the other stimuli. Future OSA researchers might consider this possibility.

Another possible explanation of the absence of the predicted OSA effect is that the cartoons may not have been sufficiently aggressive or sexual in nature to permit a recognition of their socially unacceptable nature. In the cartoon pre-ratings procedure cartoons were sorted into four categories. While there was strong agreement that the

cartoons were more aggressive or sexual than they were anything else, the pre-ratings procedure might not have assessed how strongly aggressive or sexual they were. Perhaps cartoons that are only mildly or inoffensively aggressive, for example, would not be considered socially unacceptable - even if self awareness was heightened. Future studies might consider the intensity of the sexual or aggressive content of cartoons as being of possible importance.

The finding that mirror presence resulted in higher humorousness ratings of the sexual cartoons is interesting in several regards. While OSA theory suggests that all OSA manipulations should have the same effect on people, in the present study the camera did not have the same effect that the mirror did. That is, while the mirror resulted in significantly higher ratings of the sexual cartoons (than in the control condition), the camera did not significantly affect the ratings. This result tends to support Buss's theory concerning private self awareness (supposedly induced by the mirror) as a different state than public self awareness (supposedly induced by the camera). Buss's suggestion that private self awareness would intensify one's thoughts and feelings would be consistent with the increased humorousness ratings in the mirror condition: if subjects thought the sexual cartoons were funny, they should think they were even funnier when privately self aware.

However, if the camera was supposed to increase public self awareness and concern for social standards, it should probably have reduced the humorousness ratings of the sexual cartoons - yet no such effect was found. Also, it is not clear why the ratings of the sexual cartoons were increased by the mirror, but the ratings of the nonsense and aggressive cartoons were not affected by the mirror.

In accordance with other studies, it was predicted that males would rate the sexual cartoons as being funnier than would females. While the mean rating of the sexual cartoons for the males was higher than that of the females (5.49 vs. 4.97), the difference fell short of significance. Still, the ratings seem to be consistent in direction with those of earlier studies. The small number of male subjects (N=26) may account for the failure to find a significant sex difference. A larger number of male subjects would have permitted a more adequate examination of possible sex differences in humor appreciation.

Another purpose of the study was to explore the possible relationship between anxiety and humor appreciation. The only notable finding in this regard was the interaction between trait anxiety and condition in the ratings of the sexual cartoons. The effect of anxiety disappeared though, when the analysis combined males and females (due to small cell sizes). The fact that there was no main effect for anxiety, and that the interaction disappeared in the second analysis,

suggest that any possible relationship between anxiety and humor ratings is not a strong one. The fact that the interaction was only found with the ratings of the sexual cartoons suggests that anxiety may influence the perceived humorousness of sexual cartoons, while not affecting the ratings of other types of cartoons. A larger sample size and more intensely sexual cartoon content might provide more information concerning the relationship between anxiety and humor appreciation than the present study did.

Ther results offered no support for any possible relationship between OSA and state anxiety. The OSA manipulations did not have any apparent effect upon state anxiety scores. This finding contradicts a hypothetical equation of the "negative affect" component of OSA theory with state anxiety. However, since it is possible that the OSA manipulations were not effective in this study (as discussed above), it is also possible that OSA-related anxiety was not produced. Further exploration of the possible anxiety - OSA relationship might be warranted; especially if OSA could more successfully be induced.

No evidence was found that the presence of a videotape camera influenced state anxiety levels. This finding contradicts the findings of the earlier study, upon which the hypothesized camera effect was based. It should be noted however, that the sample size of the earlier study was so small ( $N=30$ ), that it is not very surprising that those results were not replicated in the present study.

In summary, the small number of male subjects and the possible failure of the OSA manipulations to induce OSA, may limit the conclusions which can be drawn from this study. Further research concerning the effects of OSA and anxiety upon humor appreciation seem warranted. Certainly the finding that the camera did not have the same effect as the mirror upon the sexual cartoon ratings warrants further clarification, especially in light of Buss's theoretical challenge to the theory of objective self awareness. The results of the present study offer some empirical support for Buss's differentiation between private and public self awareness. As Buss himself noted though, more studies are needed which compare private and public self awareness manipulations.

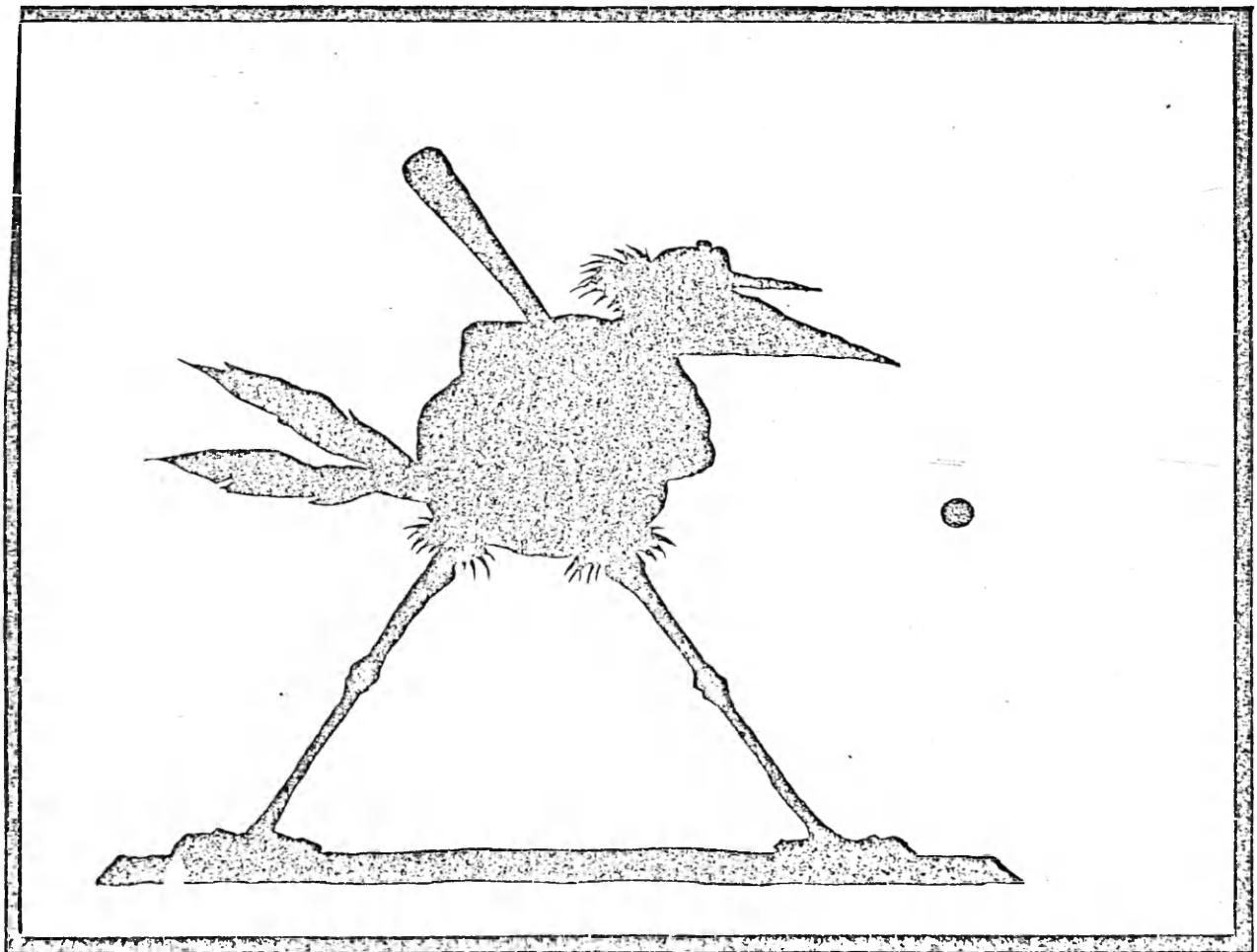


## APPENDIX A.

Nonsense Cartoons (pp. 35-42)

Sexual Cartoons (pp. 43-52)

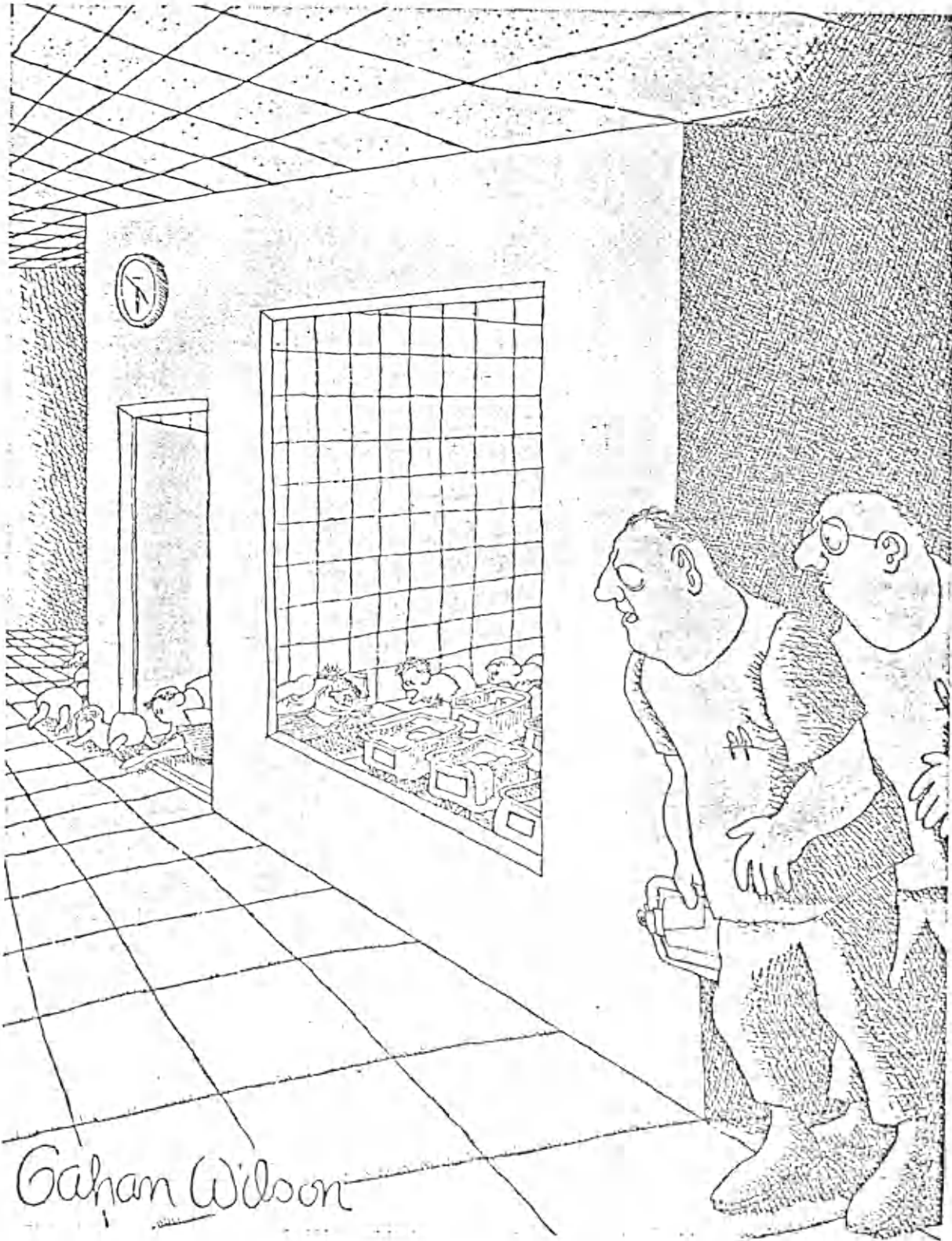
Aggressive Cartoons (pp. 53-58)



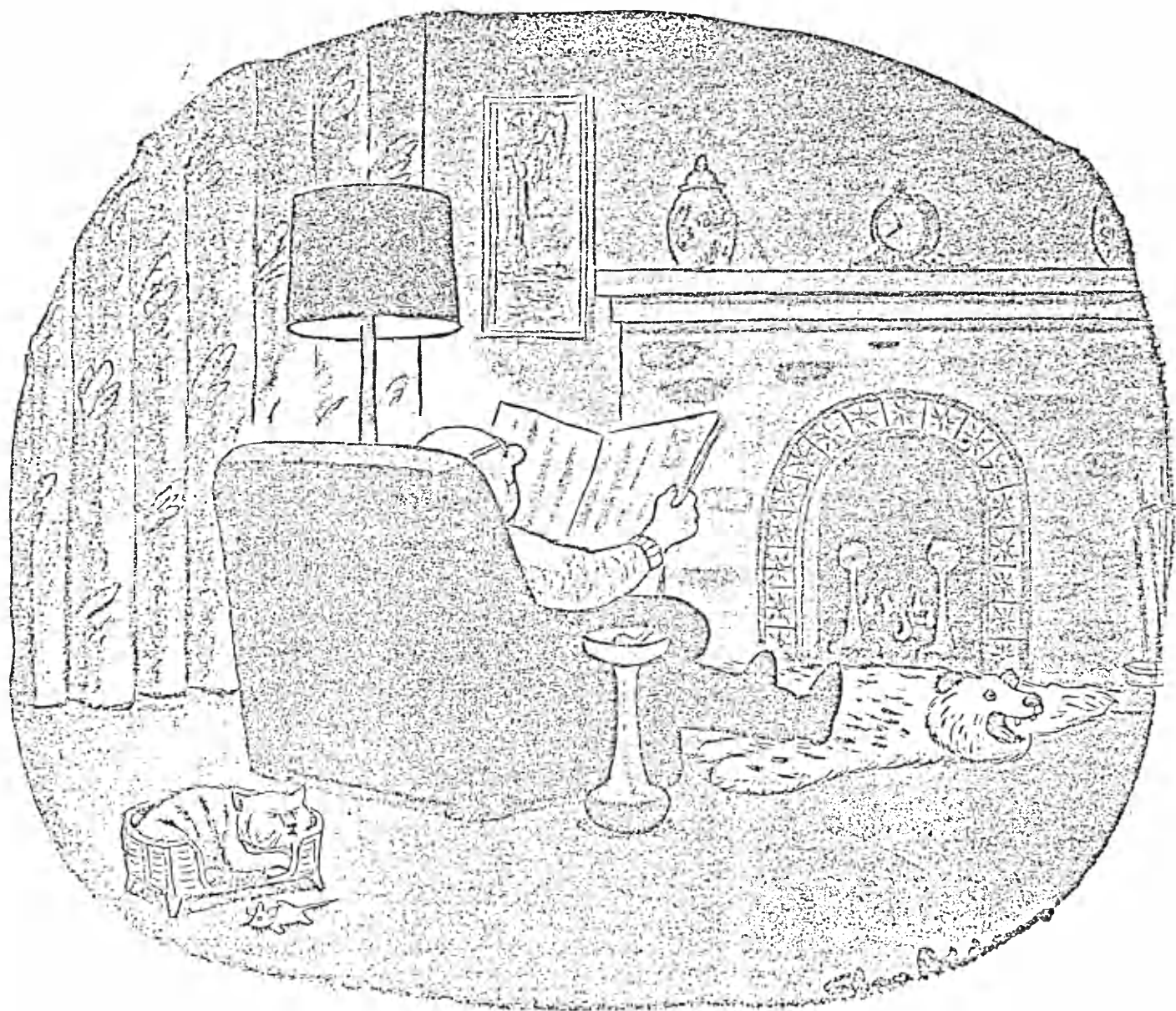
TERN AT BAT



"The set you ordered arrived today, Sir!"

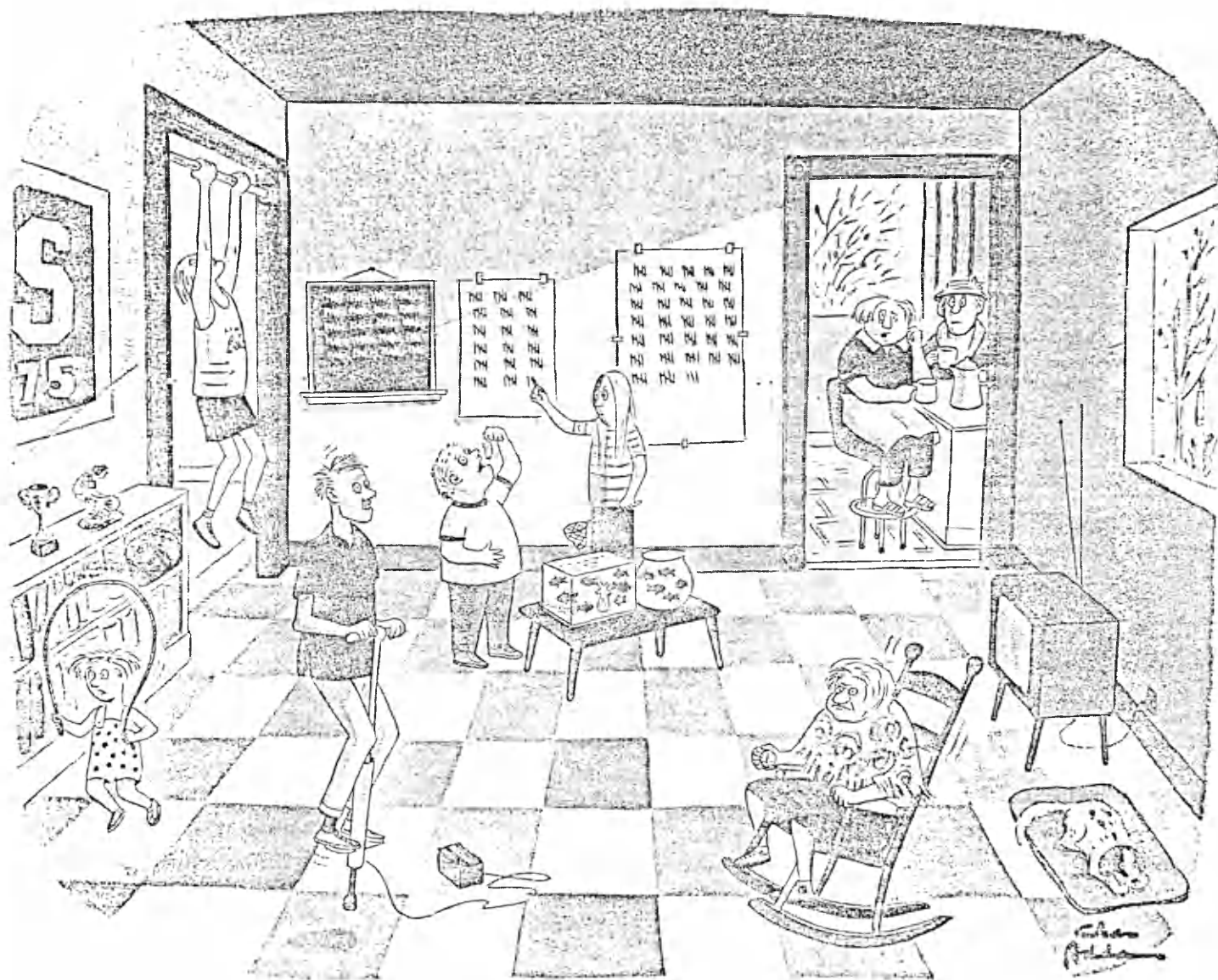


"It's a break!"







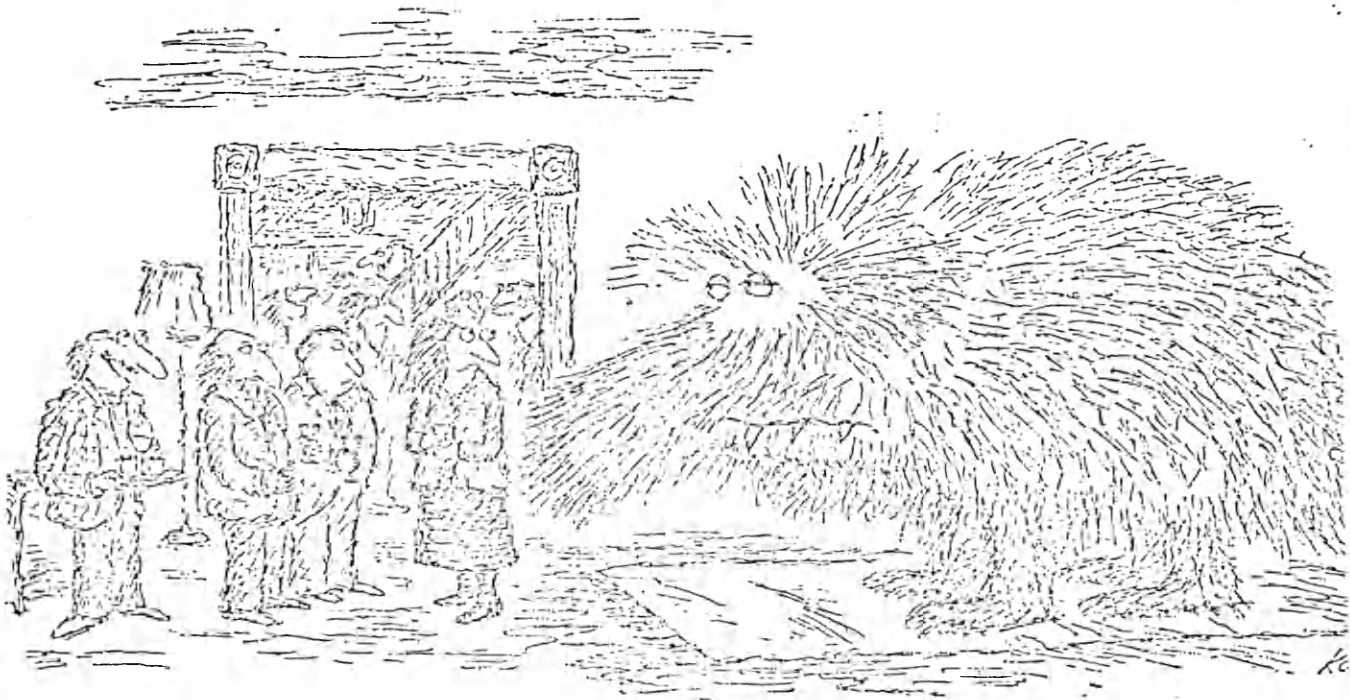


*"Sometimes I wish this family had never heard of the  
'Guinness Book of World Records.'"*

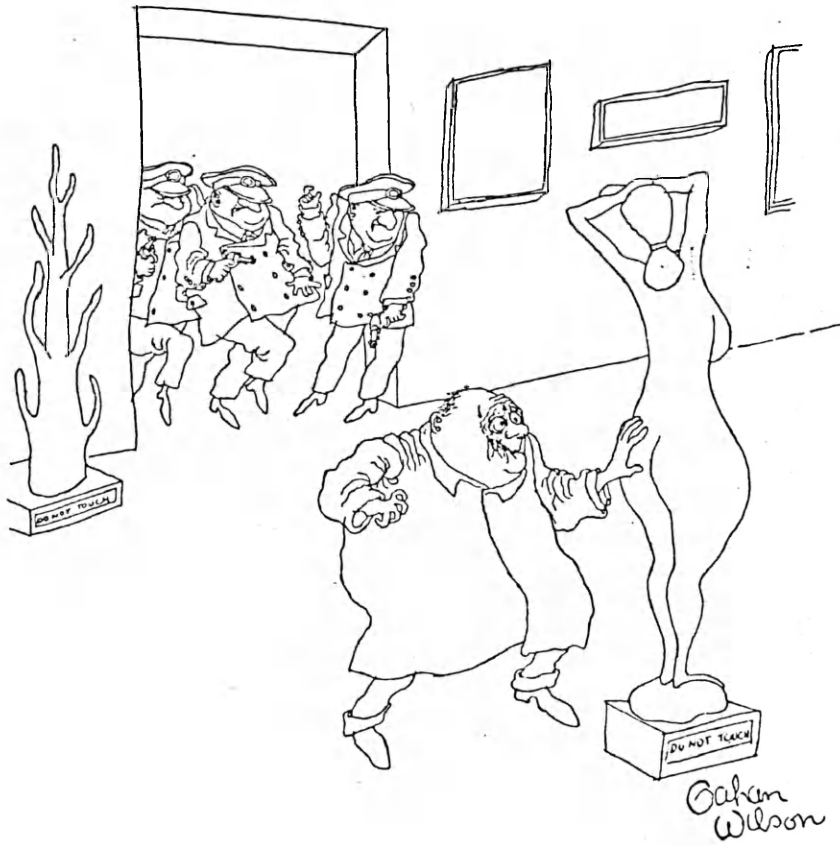


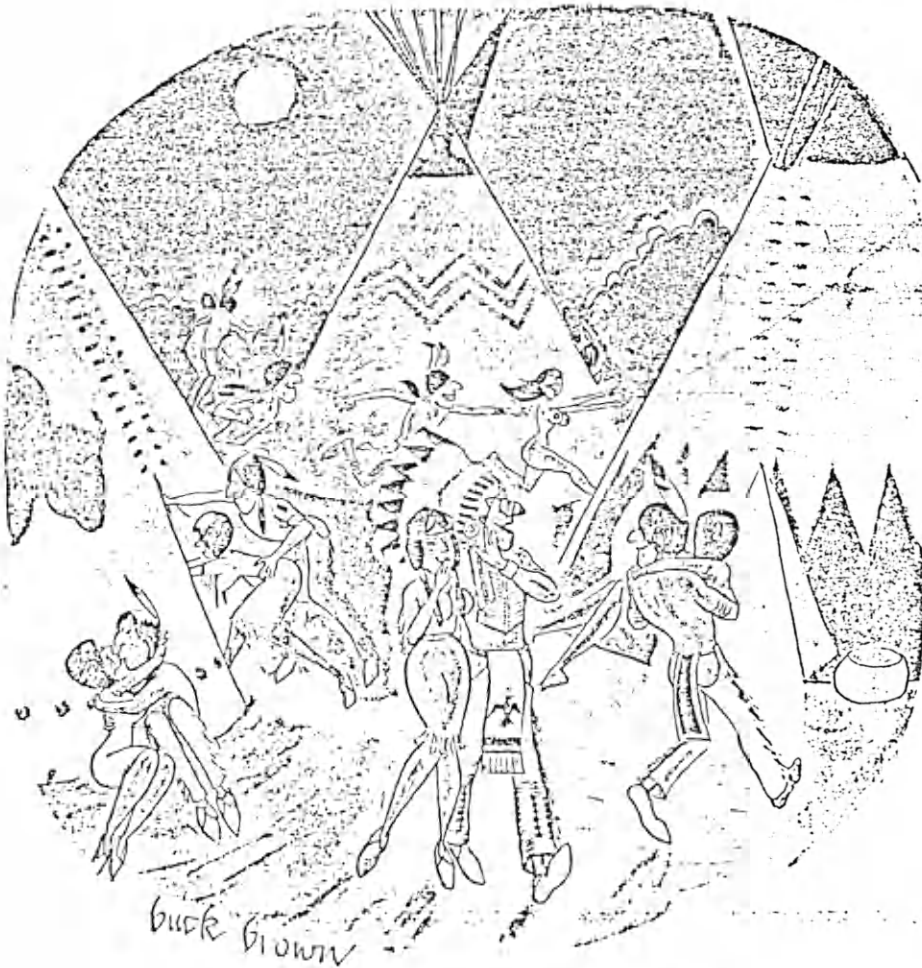
"See what I mean? No matter how many times I pull  
its trigger, the damned thing just won't fire!"





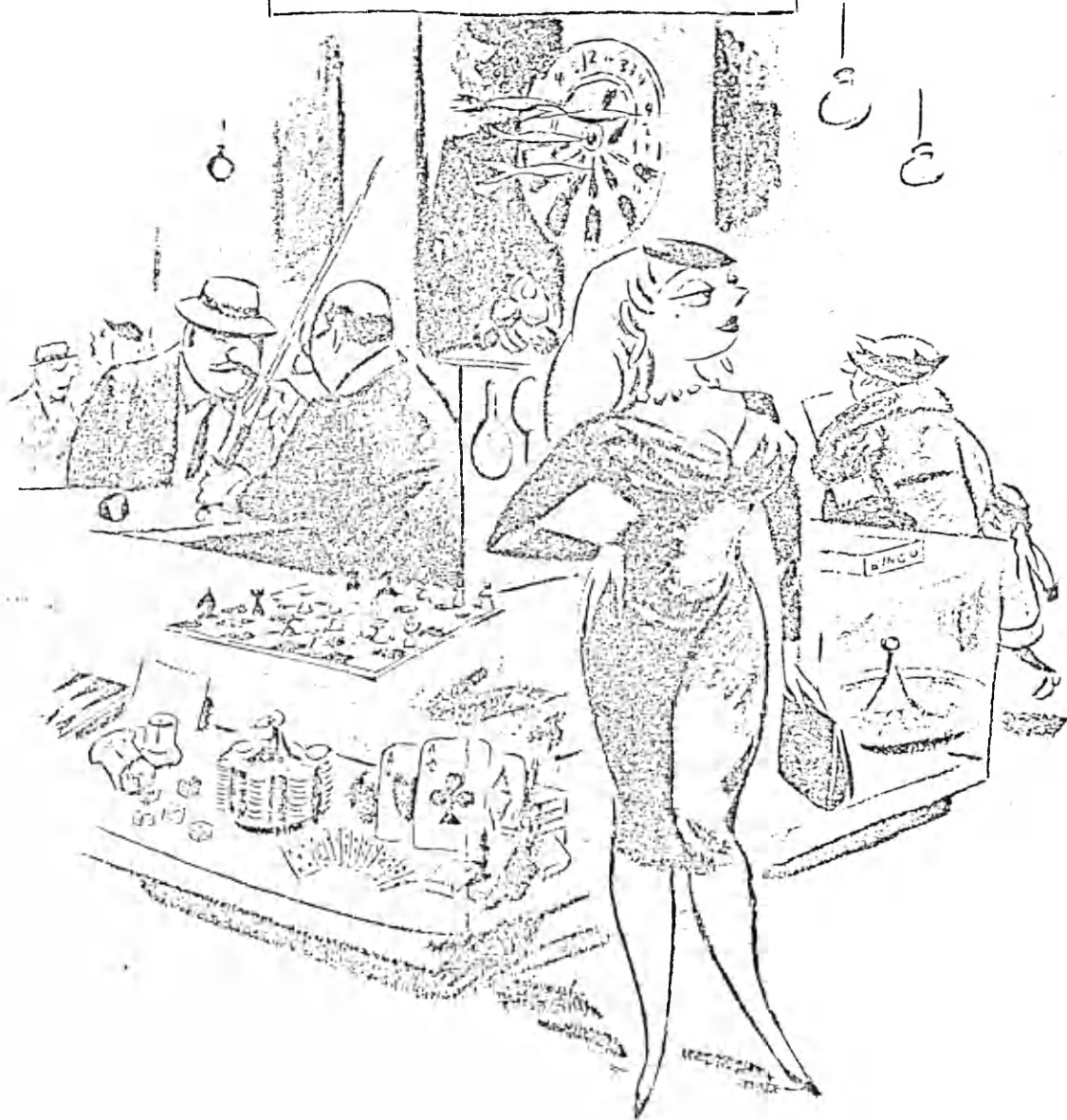
*"He loves to be petted."*

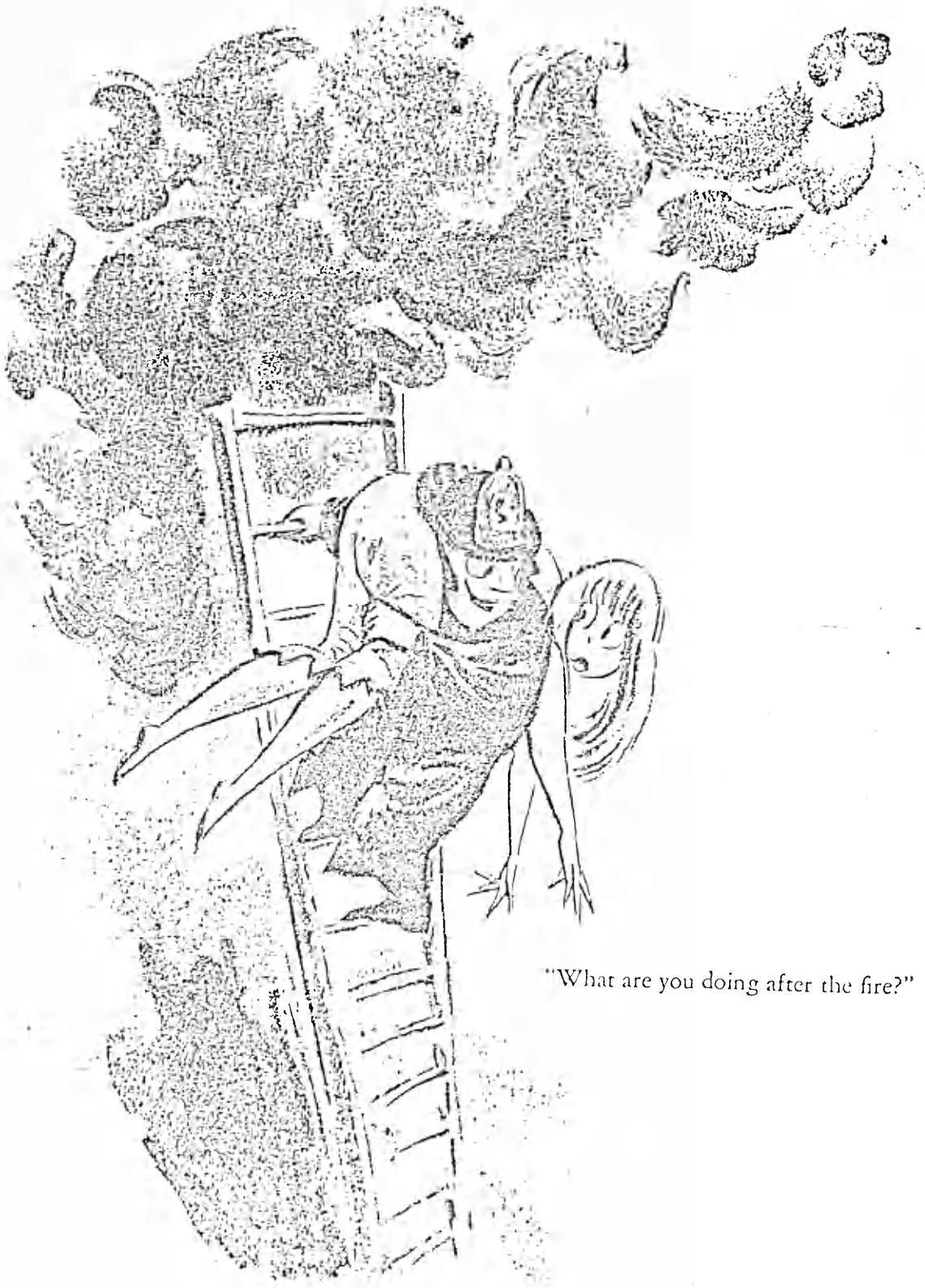




"And the white man wonders why  
we never attack at night!"

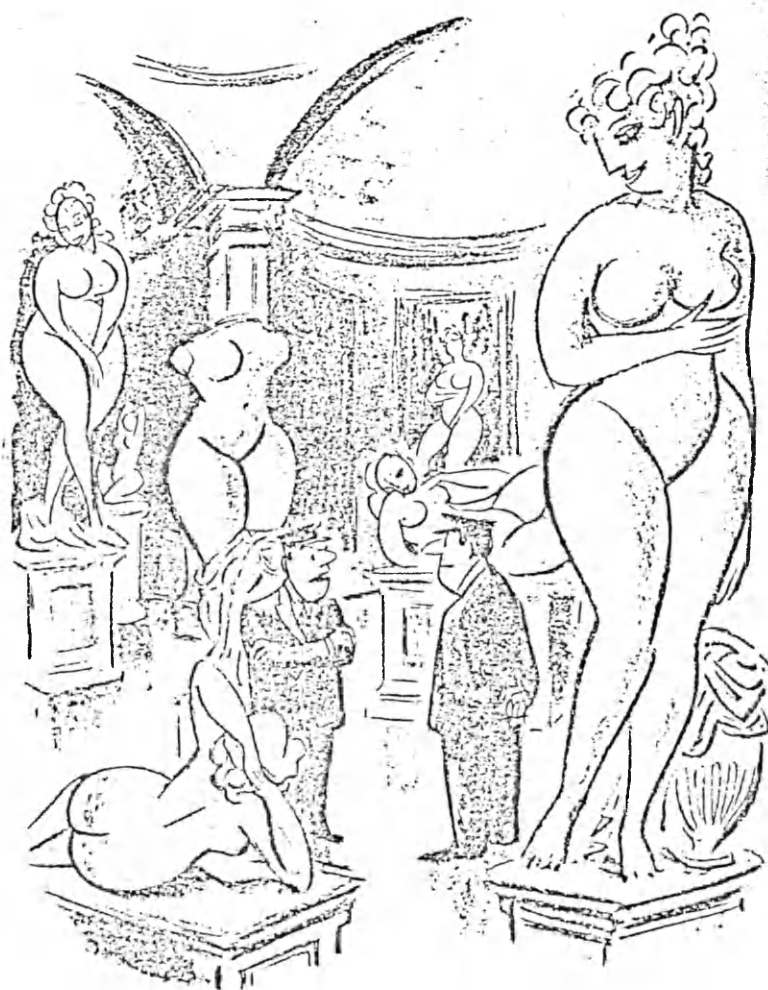
## ADULT GAMES





"What are you doing after the fire?"

"You'll never get married,  
Ed. You expect too much  
in a woman."





*"I got her on a picnic once. I thought she was the most passionate girl in the world, then I realized we were lying on an anthill."*









"Confound it! Not even token resistance?"



*"I don't generally speak to strangers, but you've been sitting on my hand for the past half hour."*





"Oh, go away!"

Cham Wilson



"You don't get rid of him that easy, Mrs. Jacowsky."



"For God's sake, Leona, why don't you just finish me off?"



"Have You Seen My Pistol, Honey-Bun?"





"That couldn't be quicksand, dear, you fell  
in there over an hour ago!"

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